

EME-A22A Analog Extension Card for VFD-E Series Instruction Sheet

- ◆ Please thoroughly read this instruction sheet before installing option cards and putting them into use.
- ◆ The content of this instruction sheet may be revised without prior notice. Please consult our distributors or download the most updated version at <http://www.delta.com.tw/industrialautomation/>.

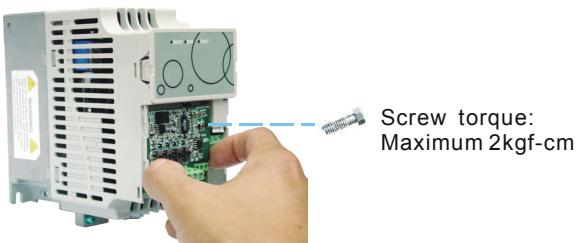
① Layout

I/O Card (EME-A22A)



② Installation

- Make sure that the AC Motor Drive is powered off before operation. DO NOT insert or remove the card when the AC Motor Drive is powered on.
- Please mount the extension card as shown and fix it with the screw packed with the card.



- Terminals Screw Torque: Maximum 5kgf-cm
- Wire Gauge: 14 ~ 24 AWG (2.1 ~ 0.2 mm²)

NOTE

- Only when the extension card is correctly installed on the AC Motor Drive, the extension card will be automatically detected. The parameters can be set in Group 12. If extension card is not installed, only parameters Group 0 ~ Group 10 can be set. Refer to Chapter 5: Parameters in the user manual for further details.

③ Specification

■ Environmental

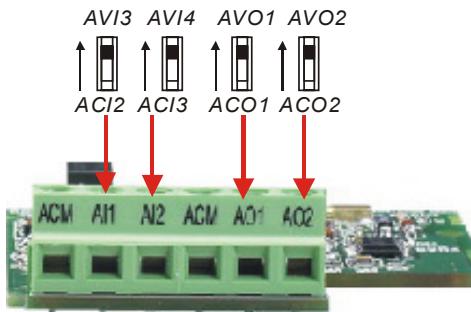
Operating Temperature	-10°C to 50°C (non-condensing and not frozen)
Storage Temperature	-20°C to + 60°C
Ambient Humidity	Less than 90%RH (non-condensing)
Installation Altitude	Below 1000m
Vibration	Below 20 Hz: Maximum 9.81 m/s ² (1G) 20 ~ 50Hz: Maximum 5.88 m/s ² (0.6G)

NOTE

- Always use this product in a clean indoor location free from dust, corrosive gas and liquid.
- Inputs/Outputs
- EME-D33A

Terminal Symbols	Descriptions
AI1 AI2	Input Voltage: 0 ~ 10VDC =0 ~ Maximum Output Frequency (Pr.01.00) Input Impedance: 100KΩ Resolution: 12 bits
AO1 AO2	Input Current: DC 0 ~ 20mA=0 ~ Maximum Output Frequency (Pr.01.00) Input Impedance: 250Ω Resolution: 12 bits Voltage/Current Switch: Please refer to the following diagram
AO1 AO2	Output Voltage: DC 0 ~ 10V Output Impedance: 1K ~ 2MΩ Resolution: 12 bits
ACM	Output Current: DC 0 ~ 20mA Output Impedance: 0 ~ 500Ω Resolution: 12 bits Voltage/Current Switch: Please refer to the following diagram
ACM	Analog control signal common

Voltage/Current Switch



④ Notes

- When the relays are used to switch inductive loads (relays, contactors, motors, etc), connect an RC network or Varistor parallel to the load to suppress voltage spikes.
- For safety, it is recommended to use fuses for the circuitry that is switched by the relays. The fuse specification must be within the specified contact limits.
- Please use shielded wires to avoid interferences and connect the shield to ground.
- The ends of wires must be tinned or crimped.
- To avoid interference, route the extension card wires separately and as far away (at least 15cm) as possible from other control wires, motor wires and power wires, etc. Where these wires must cross each other, please make sure they are at a 90° angle.
- Always use and operate this product within the limit of its specifications.

EME-A22A VFD-E 系列之類比擴充卡說明書

- ◆ 請詳細閱讀下列說明後才使用本產品，以確保使用安全。
- ◆ 由於產品精益求精，當內容規格有所修正時，請洽詢代理商或至台達網站(<http://www.delta.com.tw/industrialautomation/>)下載最新版本。

① 外觀

類比輸入/輸出卡 (EME-A22A)



② 安裝方式

- 安裝前請確認驅動器在斷電狀態下。
- 請以下圖方式安裝擴充卡並使用包裝內的螺絲固定以避免擴充卡鬆脫。



- 端子螺絲扭力：Maximum 5kgf-cm
- 線徑： $14 \sim 24 \text{ AWG}$ ($2.1 \sim 0.2 \text{ mm}^2$)

NOTE

- 若擴充卡正確安裝至變頻器上，變頻器將會自動偵測擴充卡且可使用參數群 12 (Group 12)設定。如沒有安裝擴充卡的話，參數只有 Group 0 ~ Group 10 可設定。詳細參數設定請參考使用手冊第五章參數說明。

③ 規格

■ 環境

操作溫度	-10°C to 50°C (無結露且無結凍)
儲存溫度	-20°C to + 60°C
環境溼度	90%RH 以下 (無結露)
安裝高度	低於 1000m
震動	20 Hz 以下 : Maximum 9.81 m/s^2 (1G); 20 ~ 50Hz : Maximum 5.88 m/s^2 (0.6G)

NOTE

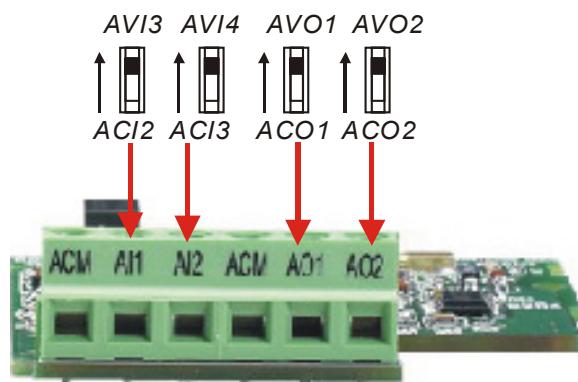
➤ 請使用此產品於無腐蝕性氣體、液體及無塵垢的室內。

■ 輸入/輸出

● EME-D33A

端子	說明
AI1 AI2	輸入電壓範圍 : 0 ~ 10VDC =0 ~ 最大輸出頻率 (Pr.01.00) 輸入阻抗 : 100KΩ 解析度 : 12 bits
	輸入電流型範圍 : DC 0 ~ 20mA=0 ~ 最大輸出頻率 (Pr.01.00) 輸入阻抗 : 250Ω 解析度 : 12 bits 電壓/電流切換請依下圖所示
AO1 AO2	輸出電壓範圍 : DC 0 ~ 10V 輸出阻抗 : 1K ~ 2MΩ 解析度 : 12 bits
	電流輸出範圍 : DC 0 ~ 20mA 輸出阻抗 : 0 ~ 500Ω 解析度 : 12 bits 電壓/電流切換請依下圖所示
ACM	類比控制信號共同端

■ 電壓/電流切換開關



④ 注意事項

- 連接電感性負載（繼電器，電磁接觸器，馬達等）時，請加裝火花消除器(RC network or Varistor)於線圈側。
- 基於安全考量，請於迴路內加裝保險絲（規格不可大於接點限制）。
- 儘可能使用隔離線（隔離層接於大地），以避免干擾。
- 線頭請吃錫或打端子。
- 基於安規上的考量，配線請保持獨立且與其它控制線，馬達線，電源線等保持 15cm 以上距離，如有交錯的必要請保持垂直配線。
- 任何時刻的操作皆不可超過規格上的限制。